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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,215	09/18/2003	Peter J. Ditzel	2003P13754US	8298

7590

07/06/2005

Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
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EDMONDSON, LYNNE RENEE

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/666,215

Applicant(s)

DITZEL ET AL.

Examiner

Lynne Edmondson

Art Unit

1725

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/18/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 10-19, 21, 26-29, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Steinberger (USPN 2466562).

Steinberger teaches a method of welding an object comprising the steps of inserting a first fugitive backing material (18) into a first portion of the cavity proximate the portion to be welded, inserting a second backing material (19) into a second portion, transforming the backing material to a rigid state by compacting and curing (baking) to harden the material (col 3 line 42 – col 4 line 9 and figure 2), forming a weld in the region (col 4 lines 10-34) and transforming backing material to a liquid state and removing the backing material from the cavity (col 4 lines 50-59 and claim 1). The fugitive backing material is prevented from extending into the weld by placement of wax (21, col 4 line 66 – col 5 line 10 and figure 4). The backing material comprises alumina and silica in a paste containing sodium silicate, which is allowed to harden (col 3 lines 41-55 and col 3 line 67 – col 4 line 9). A preformed backing (wax deposit) may be placed in the cavity adjacent the region to be welded which comprises a shape complementary to the weld shape (figure 4).

Art Unit: 1725

3. Claims 1-4, 8-11, 14-16, 24, 25 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Marechal (USPN 3551995).

Marechal teaches a method of welding an object comprising the steps of inserting a metal or refractory fugitive backing material (plug) into a first portion of the cavity proximate the portion to be welded, transforming the backing material to a rigid state by compacting and curing to harden the material, forming a weld in the region and removing the backing material from the cavity by fracture and flushing (col 2 lines 33-70 and col 5 lines 10-21). Alternatively a preformed plug (14a, 15) is used. The fugitive backing material is prevented from extending into the weld by placement of the plug.

4. Claims 1, 4-7, 18, 19, 21-23, 25- 28 and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Davey (USPN 3110103).

Davey teaches a method of welding an object comprising the steps of inserting a fugitive backing material (17) into a first portion of the cavity proximate the portion to be welded, transforming the backing material to a more rigid state by freezing to harden the material (col 1 line 59 – col 2 line 8), forming a weld in the region and removing the backing material from the cavity by melting or sublimation (col 2 lines 38-46). The backing is placed in the cavity adjacent the region to be welded which comprises a shape complementary to the weld shape (figure 2).

5. Claims 1, 2, 5, 10, 11, 20 and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Linko et al. (USPN 3825984).

Art Unit: 1725

Linko teaches a method of welding an object comprising the steps of inserting a refractory fugitive backing material into a first portion of the cavity proximate the portion to be welded, transforming the backing material to a more rigid state, forming a weld in the region and removing the backing material from the cavity by leaching, dissolving and flushing (col 4 lines 8-19 and lines 48-67 and figure 4).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kent et al. (USPN 2320700), Norton, Jr. (USPN 2847958), Davis et al. (USPN 2743515) and Gilbert (USPN 3338499).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (571) 272-1172. The examiner can normally be reached on Monday through Thursday from 6:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lynne Edmondson  
Primary Examiner  
Art Unit 1725

**LYNNE R. EDMONDSON**  
**PRIMARY EXAMINER**

*LE 6/3/05*

LRE